

1 **WHAT IS CLAIMED IS:**

2 1. A syringe safety sleeve mounted on a syringe comprising a hollow
3 barrel having a proximal end, a distal end and a finger flange formed integrally
4 with and extending radially out from the proximal end, a plunger, a needle hub, a
5 needle and a safety cover covering the needle and attached to the needle hub
6 before the syringe is used, the syringe safety sleeve comprising:

7 an outer sleeve having

8 an open proximal end;

9 an open distal end; and

10 a locking member formed on the open proximal end; and

11 an inner sleeve slidably mounted inside the outer sleeve and having

12 an open proximal end being tapered outward and selectively

13 connected to the outer sleeve by pulling the outer sleeve out from the inner
14 sleeve;

15 an open distal end;

16 a locking unit formed at the open proximal end and corresponding to
17 the locking member; and

18 a barrel connector formed on the open distal end of the inner sleeve
19 to connect the inner sleeve to a conventional syringe

20 2. The syringe safety sleeve as claimed in claim 1, wherein the locking
21 member in the outer sleeve is multiple protrusions extending inward from the
22 open proximal end.

23 3. The syringe safety sleeve as claimed in claim 1, wherein the locking
24 member in the outer sleeve is an annular rib extending inward from the open

1 proximal end.

2 4. The syringe safety sleeve as claimed in claim 1, wherein the open
3 distal end of the outer sleeve is tapered inward.

4 5. The syringe safety sleeve as claimed in claim 1, wherein the locking
5 unit is an annular recess corresponding to the locking member.

6 6. The syringe safety sleeve as claimed in claim 1, wherein the barrel
7 connector has

8 a flange formed on and protruding radially from the open distal
9 end of the inner sleeve and having

10 a center;

11 a connected side;

12 an unconnected side;

13 a bottom; and

14 a central hole formed in the center of the flange;

15 a retainer selectively connected to the flange and having

16 a connected side;

17 an unconnected side; and

18 a notch shaped to accommodate free movement of the

19 syringe plunger and communicating with the unconnected side; and

20 multiple fasteners formed near the unconnected side and

21 selectively attached to the flange to connect the syringe safety sleeve to the

22 finger flange of a conventional syringe; and

23 a hinge that pivotally connects the connected side of the retainer

24 to the connected side of the flange and has two sides securely attached

1 respectively to the connected sides of the retainer and the flange.

2 7. The syringe safety sleeve as claimed in claim 6, wherein the barrel
3 connector flange has multiple fastener holders formed near the unconnected side.

4 8. The syringe safety sleeve as claimed in claim 7, wherein the fastener
5 holders in the flange are through holes.

6 9. The syringe safety sleeve as claimed in claim 7, wherein the fastener
7 holders in the flange are slots.

8 10. The syringe safety sleeve as claimed in claim 7, wherein the fastener
9 holders in the flange are notches.

10 11. The syringe safety sleeve as claimed in claim 8, wherein the
11 fasteners on the retainer are cylindrical protrusions with enlarged heads
12 corresponding respectively to the through holes.

13 12. The syringe safety sleeve as claimed in claim 9, wherein the
14 fasteners on the retainer are cylindrical protrusions with enlarged heads
15 corresponding respectively to the slots.

16 13. The syringe safety sleeve as claimed in claim 6, wherein the
17 fasteners on the retainer are hooks.

18 14. The syringe safety sleeve as claimed in claim 6, wherein the
19 fasteners on the retainer are flexible tabs.

20 15. The syringe safety sleeve as claimed in claim 9, wherein the
21 fasteners on the retainer are T-shaped tabs corresponding respectively to the
22 slots.

23 16. The syringe safety sleeve as claimed in claim 10, wherein the
24 fasteners on the retainer are T-shaped tabs corresponding respectively to the

1 notches.

2 17. The syringe safety sleeve as claimed in claim 6, wherein the hinge is
3 a mechanical hinge.

4 18. The syringe safety sleeve as claimed in claim 6, wherein the hinge is
5 a flexible tab.